



















Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.6	0.000324	± 2.5	PASS
		VN	TN	0.24	0.000130	± 2.5	PASS
		VH	TN	2.02	0.001091	± 2.5	PASS
	MCH	VL	TN	1.54	0.000819	± 2.5	PASS
		VN	TN	0.37	0.000197	± 2.5	PASS
		VH	TN	-0.67	-0.000356	± 2.5	PASS
	HCH	VL	TN	-0.58	-0.000304	± 2.5	PASS
		VN	TN	3.18	0.001666	± 2.5	PASS
		VH	TN	4.94	0.002587	± 2.5	PASS
16QAM	LCH	VL	TN	2.57	0.001389	± 2.5	PASS
		VN	TN	4.43	0.002394	± 2.5	PASS
		VH	TN	-0.53	-0.000286	± 2.5	PASS
	MCH	VL	TN	-0.19	-0.000101	± 2.5	PASS
		VN	TN	-0.22	-0.000117	± 2.5	PASS
		VH	TN	0.46	0.000245	± 2.5	PASS
	HCH	VL	TN	4.74	0.002483	± 2.5	PASS
		VN	TN	-1.68	-0.000880	± 2.5	PASS
		VH	TN	3.16	0.001655	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.05	0.001108	± 2.5	PASS
		VN	-20	-0.44	-0.000238	± 2.5	PASS
		VN	-10	2.01	0.001086	± 2.5	PASS
		VN	0	4.78	0.002583	± 2.5	PASS
		VN	10	2.46	0.001329	± 2.5	PASS
		VN	20	-0.51	-0.000276	± 2.5	PASS
		VN	30	2.18	0.001178	± 2.5	PASS
		VN	40	1.66	0.000897	± 2.5	PASS
		VN	50	-0.46	-0.000249	± 2.5	PASS
	MCH	VN	-30	-0.87	-0.000463	± 2.5	PASS

		VN	-20	3.2	0.001702	± 2.5	PASS
		VN	-10	1.29	0.000686	± 2.5	PASS
		VN	0	2.64	0.001404	± 2.5	PASS
		VN	10	2.86	0.001521	± 2.5	PASS
		VN	20	3.76	0.002000	± 2.5	PASS
		VN	30	1.36	0.000723	± 2.5	PASS
		VN	40	1.33	0.000707	± 2.5	PASS
		VN	50	-1.29	-0.000686	± 2.5	PASS
	HCH	VN	-30	3.14	0.001645	± 2.5	PASS
		VN	-20	2.38	0.001247	± 2.5	PASS
		VN	-10	2.24	0.001173	± 2.5	PASS
		VN	0	-0.23	-0.000120	± 2.5	PASS
		VN	10	-1.65	-0.000864	± 2.5	PASS
		VN	20	3.98	0.002085	± 2.5	PASS
		VN	30	-0.88	-0.000461	± 2.5	PASS
		VN	40	2.75	0.001440	± 2.5	PASS
		VN	50	0.85	0.000445	± 2.5	PASS
		16QAM	LCH	VN	-30	0.95	0.000513
VN	-20			1.23	0.000665	± 2.5	PASS
VN	-10			4.36	0.002356	± 2.5	PASS
VN	0			0.48	0.000259	± 2.5	PASS
VN	10			-1.82	-0.000983	± 2.5	PASS
VN	20			-1.01	-0.000546	± 2.5	PASS
VN	30			0.03	0.000016	± 2.5	PASS
VN	40			-0.82	-0.000443	± 2.5	PASS
VN	50			1.03	0.000557	± 2.5	PASS
MCH	VN		-30	0.55	0.000293	± 2.5	PASS
	VN		-20	1.89	0.001005	± 2.5	PASS
	VN		-10	4.01	0.002133	± 2.5	PASS
	VN		0	4.92	0.002617	± 2.5	PASS
	VN		10	0.48	0.000255	± 2.5	PASS
	VN		20	-0.32	-0.000170	± 2.5	PASS
	VN		30	4.49	0.002388	± 2.5	PASS
	VN		40	1.63	0.000867	± 2.5	PASS
	VN		50	2.98	0.001585	± 2.5	PASS
HCH	VN		-30	-0.85	-0.000445	± 2.5	PASS
	VN		-20	2.18	0.001142	± 2.5	PASS
	VN		-10	1.28	0.000670	± 2.5	PASS
	VN		0	1.17	0.000613	± 2.5	PASS
	VN		10	3.19	0.001671	± 2.5	PASS
	VN		20	2.42	0.001267	± 2.5	PASS

		VN	30	4.09	0.002142	± 2.5	PASS
		VN	40	-0.71	-0.000372	± 2.5	PASS
		VN	50	3.89	0.002037	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	2.94	0.001588	± 2.5	PASS
		VN	TN	-0.49	-0.000265	± 2.5	PASS
		VH	TN	4.06	0.002193	± 2.5	PASS
	MCH	VL	TN	-0.99	-0.000527	± 2.5	PASS
		VN	TN	-1.43	-0.000761	± 2.5	PASS
		VH	TN	0.84	0.000447	± 2.5	PASS
	HCH	VL	TN	0.06	0.000031	± 2.5	PASS
		VN	TN	-1.13	-0.000592	± 2.5	PASS
		VH	TN	3.42	0.001792	± 2.5	PASS
16QAM	LCH	VL	TN	0.72	0.000389	± 2.5	PASS
		VN	TN	4.28	0.002312	± 2.5	PASS
		VH	TN	4.84	0.002614	± 2.5	PASS
	MCH	VL	TN	0.59	0.000314	± 2.5	PASS
		VN	TN	2.29	0.001218	± 2.5	PASS
		VH	TN	2.39	0.001271	± 2.5	PASS
	HCH	VL	TN	0.16	0.000084	± 2.5	PASS
		VN	TN	2.61	0.001368	± 2.5	PASS
		VH	TN	2.8	0.001467	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.84	-0.000994	± 2.5	PASS
		VN	-20	-0.96	-0.000518	± 2.5	PASS
		VN	-10	-1.52	-0.000821	± 2.5	PASS
		VN	0	-1.98	-0.001069	± 2.5	PASS
		VN	10	2.16	0.001167	± 2.5	PASS
		VN	20	0.94	0.000508	± 2.5	PASS
		VN	30	-1.92	-0.001037	± 2.5	PASS
		VN	40	-0.09	-0.000049	± 2.5	PASS
		VN	50	1.24	0.000670	± 2.5	PASS
	MCH	VN	-30	4.91	0.002612	± 2.5	PASS
		VN	-20	-0.77	-0.000410	± 2.5	PASS

		VN	-10	4.24	0.002255	± 2.5	PASS		
		VN	0	-0.56	-0.000298	± 2.5	PASS		
		VN	10	2.38	0.001266	± 2.5	PASS		
		VN	20	0.6	0.000319	± 2.5	PASS		
		VN	30	2.94	0.001564	± 2.5	PASS		
		VN	40	1.25	0.000665	± 2.5	PASS		
		VN	50	2.73	0.001452	± 2.5	PASS		
	HCH	VN	-30	4.66	0.002442	± 2.5	PASS		
		VN	-20	3.37	0.001766	± 2.5	PASS		
		VN	-10	-0.9	-0.000472	± 2.5	PASS		
		VN	0	-1.96	-0.001027	± 2.5	PASS		
		VN	10	-1.11	-0.000582	± 2.5	PASS		
		VN	20	4.03	0.002112	± 2.5	PASS		
		VN	30	0.5	0.000262	± 2.5	PASS		
		VN	40	3.38	0.001771	± 2.5	PASS		
		VN	50	-0.52	-0.000272	± 2.5	PASS		
		16QAM	LCH	VN	-30	0.99	0.000535	± 2.5	PASS
				VN	-20	-1.35	-0.000729	± 2.5	PASS
				VN	-10	2.6	0.001404	± 2.5	PASS
VN	0			4.98	0.002690	± 2.5	PASS		
VN	10			2.17	0.001172	± 2.5	PASS		
VN	20			3.81	0.002058	± 2.5	PASS		
VN	30			-1.51	-0.000816	± 2.5	PASS		
VN	40			1.06	0.000573	± 2.5	PASS		
VN	50			3.34	0.001804	± 2.5	PASS		
MCH	VN		-30	4.25	0.002261	± 2.5	PASS		
	VN		-20	1.5	0.000798	± 2.5	PASS		
	VN		-10	0.73	0.000388	± 2.5	PASS		
	VN		0	0.26	0.000138	± 2.5	PASS		
	VN		10	3.14	0.001670	± 2.5	PASS		
	VN		20	2.24	0.001191	± 2.5	PASS		
	VN		30	4.47	0.002378	± 2.5	PASS		
	VN		40	2.63	0.001399	± 2.5	PASS		
	VN		50	-0.84	-0.000447	± 2.5	PASS		
HCH	VN		-30	1.81	0.000948	± 2.5	PASS		
	VN		-20	4.59	0.002405	± 2.5	PASS		
	VN		-10	-1.08	-0.000566	± 2.5	PASS		
	VN		0	-1.92	-0.001006	± 2.5	PASS		
	VN		10	-1.95	-0.001022	± 2.5	PASS		
	VN		20	0.18	0.000094	± 2.5	PASS		
	VN		30	0.62	0.000325	± 2.5	PASS		

		VN	40	3.92	0.002054	± 2.5	PASS
		VN	50	0.16	0.000084	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	3.53	0.001906	± 2.5	PASS
		VN	TN	2.84	0.001533	± 2.5	PASS
		VH	TN	-1.01	-0.000545	± 2.5	PASS
	MCH	VL	TN	3.33	0.001771	± 2.5	PASS
		VN	TN	3.2	0.001702	± 2.5	PASS
		VH	TN	0.02	0.000011	± 2.5	PASS
	HCH	VL	TN	3.02	0.001583	± 2.5	PASS
		VN	TN	0.33	0.000173	± 2.5	PASS
		VH	TN	-0.41	-0.000215	± 2.5	PASS
16QAM	LCH	VL	TN	-0.05	-0.000027	± 2.5	PASS
		VN	TN	3.88	0.002094	± 2.5	PASS
		VH	TN	-0.01	-0.000005	± 2.5	PASS
	MCH	VL	TN	-0.39	-0.000207	± 2.5	PASS
		VN	TN	2.2	0.001170	± 2.5	PASS
		VH	TN	-1.25	-0.000665	± 2.5	PASS
	HCH	VL	TN	0.14	0.000073	± 2.5	PASS
		VN	TN	3.13	0.001641	± 2.5	PASS
		VH	TN	0.6	0.000315	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.07	-0.000578	± 2.5	PASS
		VN	-20	-0.09	-0.000049	± 2.5	PASS
		VN	-10	1.5	0.000810	± 2.5	PASS
		VN	0	-1.71	-0.000923	± 2.5	PASS
		VN	10	-1.42	-0.000767	± 2.5	PASS
		VN	20	-1.6	-0.000864	± 2.5	PASS
		VN	30	4.1	0.002213	± 2.5	PASS
		VN	40	4.43	0.002391	± 2.5	PASS
		VN	50	0.12	0.000065	± 2.5	PASS
	MCH	VN	-30	1.35	0.000718	± 2.5	PASS
		VN	-20	3.14	0.001670	± 2.5	PASS
		VN	-10	-2	-0.001064	± 2.5	PASS

		VN	0	3.17	0.001686	± 2.5	PASS		
		VN	10	0.22	0.000117	± 2.5	PASS		
		VN	20	-0.39	-0.000207	± 2.5	PASS		
		VN	30	0.76	0.000404	± 2.5	PASS		
		VN	40	0.88	0.000468	± 2.5	PASS		
		VN	50	4.36	0.002319	± 2.5	PASS		
	HCH	VN	-30	0.72	0.000377	± 2.5	PASS		
		VN	-20	-0.19	-0.000100	± 2.5	PASS		
		VN	-10	1.72	0.000902	± 2.5	PASS		
		VN	0	-1.53	-0.000802	± 2.5	PASS		
		VN	10	-1.68	-0.000881	± 2.5	PASS		
		VN	20	-1.88	-0.000986	± 2.5	PASS		
		VN	30	0.34	0.000178	± 2.5	PASS		
		VN	40	2.99	0.001567	± 2.5	PASS		
		VN	50	-0.43	-0.000225	± 2.5	PASS		
		16QAM	LCH	VN	-30	4.85	0.002618	± 2.5	PASS
				VN	-20	-0.56	-0.000302	± 2.5	PASS
				VN	-10	0.72	0.000389	± 2.5	PASS
				VN	0	4.62	0.002494	± 2.5	PASS
VN	10			-0.12	-0.000065	± 2.5	PASS		
VN	20			-1.24	-0.000669	± 2.5	PASS		
VN	30			-0.37	-0.000200	± 2.5	PASS		
VN	40			2.72	0.001468	± 2.5	PASS		
VN	50			0.11	0.000059	± 2.5	PASS		
MCH	VN		-30	-1.65	-0.000878	± 2.5	PASS		
	VN		-20	4.72	0.002511	± 2.5	PASS		
	VN		-10	-0.23	-0.000122	± 2.5	PASS		
	VN		0	2.44	0.001298	± 2.5	PASS		
	VN		10	1.05	0.000559	± 2.5	PASS		
	VN		20	3.25	0.001729	± 2.5	PASS		
	VN		30	-1.3	-0.000691	± 2.5	PASS		
	VN		40	0.63	0.000335	± 2.5	PASS		
	VN		50	1.03	0.000548	± 2.5	PASS		
HCH	VN		-30	2.59	0.001358	± 2.5	PASS		
	VN	-20	-1.68	-0.000881	± 2.5	PASS			
	VN	-10	1.07	0.000561	± 2.5	PASS			
	VN	0	2.83	0.001484	± 2.5	PASS			
	VN	10	4.11	0.002155	± 2.5	PASS			
	VN	20	4.88	0.002558	± 2.5	PASS			
	VN	30	4.75	0.002490	± 2.5	PASS			
	VN	40	4.44	0.002328	± 2.5	PASS			

		VN	50	4.58	0.002401	± 2.5	PASS
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Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.29	-0.000156	± 2.5	PASS
		VN	TN	-0.27	-0.000146	± 2.5	PASS
		VH	TN	2.15	0.001159	± 2.5	PASS
	MCH	VL	TN	2.83	0.001505	± 2.5	PASS
		VN	TN	4.68	0.002489	± 2.5	PASS
		VH	TN	-1.12	-0.000596	± 2.5	PASS
	HCH	VL	TN	-1.68	-0.000882	± 2.5	PASS
		VN	TN	3.01	0.001580	± 2.5	PASS
		VH	TN	2.04	0.001071	± 2.5	PASS
16QAM	LCH	VL	TN	-0.93	-0.000501	± 2.5	PASS
		VN	TN	1.15	0.000620	± 2.5	PASS
		VH	TN	1.65	0.000889	± 2.5	PASS
	MCH	VL	TN	1.37	0.000729	± 2.5	PASS
		VN	TN	4.05	0.002154	± 2.5	PASS
		VH	TN	2.11	0.001122	± 2.5	PASS
	HCH	VL	TN	1.28	0.000672	± 2.5	PASS
		VN	TN	-1.61	-0.000845	± 2.5	PASS
		VH	TN	-0.51	-0.000268	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.83	0.002065	± 2.5	PASS
		VN	-20	4.1	0.002210	± 2.5	PASS
		VN	-10	0.6	0.000323	± 2.5	PASS
		VN	0	3.03	0.001633	± 2.5	PASS
		VN	10	2.57	0.001385	± 2.5	PASS
		VN	20	1.6	0.000863	± 2.5	PASS
		VN	30	-1.04	-0.000561	± 2.5	PASS
		VN	40	4.11	0.002216	± 2.5	PASS
		VN	50	-0.79	-0.000426	± 2.5	PASS
	MCH	VN	-30	-0.58	-0.000309	± 2.5	PASS
		VN	-20	1.32	0.000702	± 2.5	PASS
		VN	-10	1.34	0.000713	± 2.5	PASS
		VN	0	3.25	0.001729	± 2.5	PASS

		VN	10	-0.07	-0.000037	± 2.5	PASS
		VN	20	3.09	0.001644	± 2.5	PASS
		VN	30	1	0.000532	± 2.5	PASS
		VN	40	-1.62	-0.000862	± 2.5	PASS
		VN	50	-1.32	-0.000702	± 2.5	PASS
	HCH	VN	-30	2.3	0.001207	± 2.5	PASS
		VN	-20	2.88	0.001512	± 2.5	PASS
		VN	-10	3.34	0.001753	± 2.5	PASS
		VN	0	-1.44	-0.000756	± 2.5	PASS
		VN	10	4.06	0.002131	± 2.5	PASS
		VN	20	-0.8	-0.000420	± 2.5	PASS
		VN	30	4.93	0.002588	± 2.5	PASS
		VN	40	0.35	0.000184	± 2.5	PASS
		VN	50	-0.74	-0.000388	± 2.5	PASS
		16QAM	LCH	VN	-30	2.15	0.001159
VN	-20			3.71	0.002000	± 2.5	PASS
VN	-10			1.56	0.000841	± 2.5	PASS
VN	0			1.03	0.000555	± 2.5	PASS
VN	10			-0.82	-0.000442	± 2.5	PASS
VN	20			1.41	0.000760	± 2.5	PASS
VN	30			2.64	0.001423	± 2.5	PASS
VN	40			-0.24	-0.000129	± 2.5	PASS
VN	50			3.24	0.001747	± 2.5	PASS
MCH	VN		-30	2.61	0.001388	± 2.5	PASS
	VN		-20	2.24	0.001191	± 2.5	PASS
	VN		-10	1.31	0.000697	± 2.5	PASS
	VN		0	3.42	0.001819	± 2.5	PASS
	VN		10	-1.68	-0.000894	± 2.5	PASS
	VN		20	0.37	0.000197	± 2.5	PASS
	VN		30	-0.8	-0.000426	± 2.5	PASS
	VN		40	4.46	0.002372	± 2.5	PASS
	VN		50	-1.81	-0.000963	± 2.5	PASS
HCH	VN		-30	2.03	0.001066	± 2.5	PASS
	VN		-20	-1.83	-0.000961	± 2.5	PASS
	VN		-10	0.24	0.000126	± 2.5	PASS
	VN		0	0.66	0.000346	± 2.5	PASS
	VN		10	0.2	0.000105	± 2.5	PASS
	VN		20	1.35	0.000709	± 2.5	PASS
	VN		30	3.01	0.001580	± 2.5	PASS
	VN		40	0.49	0.000257	± 2.5	PASS
	VN		50	-0.3	-0.000157	± 2.5	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.87	-0.001007	± 2.5	PASS
		VN	TN	-0.18	-0.000097	± 2.5	PASS
		VH	TN	-0.88	-0.000474	± 2.5	PASS
	MCH	VL	TN	-0.83	-0.000441	± 2.5	PASS
		VN	TN	-0.58	-0.000309	± 2.5	PASS
		VH	TN	-0.79	-0.000420	± 2.5	PASS
	HCH	VL	TN	4.17	0.002192	± 2.5	PASS
		VN	TN	3.46	0.001819	± 2.5	PASS
		VH	TN	3.6	0.001892	± 2.5	PASS
16QAM	LCH	VL	TN	4.52	0.002433	± 2.5	PASS
		VN	TN	3.51	0.001890	± 2.5	PASS
		VH	TN	2.3	0.001238	± 2.5	PASS
	MCH	VL	TN	3.5	0.001862	± 2.5	PASS
		VN	TN	0.48	0.000255	± 2.5	PASS
		VH	TN	1.04	0.000553	± 2.5	PASS
	HCH	VL	TN	-1.78	-0.000936	± 2.5	PASS
		VN	TN	-1.7	-0.000894	± 2.5	PASS
		VH	TN	-0.54	-0.000284	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.24	-0.000668	± 2.5	PASS
		VN	-20	1.02	0.000549	± 2.5	PASS
		VN	-10	-1.47	-0.000791	± 2.5	PASS
		VN	0	-0.91	-0.000490	± 2.5	PASS
		VN	10	0.58	0.000312	± 2.5	PASS
		VN	20	4.37	0.002353	± 2.5	PASS
		VN	30	1.4	0.000754	± 2.5	PASS
		VN	40	0.64	0.000345	± 2.5	PASS
		VN	50	2.33	0.001254	± 2.5	PASS
	MCH	VN	-30	4.04	0.002149	± 2.5	PASS
		VN	-20	1.5	0.000798	± 2.5	PASS
		VN	-10	3.53	0.001878	± 2.5	PASS
		VN	0	-1.15	-0.000612	± 2.5	PASS
		VN	10	-1.27	-0.000676	± 2.5	PASS

		VN	20	1.5	0.000798	± 2.5	PASS
		VN	30	-1.25	-0.000665	± 2.5	PASS
		VN	40	-0.96	-0.000511	± 2.5	PASS
		VN	50	-0.26	-0.000138	± 2.5	PASS
	HCH	VN	-30	-1.13	-0.000594	± 2.5	PASS
		VN	-20	0.9	0.000473	± 2.5	PASS
		VN	-10	-1.51	-0.000794	± 2.5	PASS
		VN	0	-0.22	-0.000116	± 2.5	PASS
		VN	10	1.39	0.000731	± 2.5	PASS
		VN	20	4.47	0.002350	± 2.5	PASS
		VN	30	-0.48	-0.000252	± 2.5	PASS
		VN	40	-1.99	-0.001046	± 2.5	PASS
		VN	50	3.49	0.001834	± 2.5	PASS
16QAM	LCH	VN	-30	-0.15	-0.000081	± 2.5	PASS
		VN	-20	1.01	0.000544	± 2.5	PASS
		VN	-10	3.38	0.001820	± 2.5	PASS
		VN	0	3.54	0.001906	± 2.5	PASS
		VN	10	-0.02	-0.000011	± 2.5	PASS
		VN	20	2.66	0.001432	± 2.5	PASS
		VN	30	2.98	0.001604	± 2.5	PASS
		VN	40	2.73	0.001470	± 2.5	PASS
		VN	50	2.22	0.001195	± 2.5	PASS
	MCH	VN	-30	3.04	0.001617	± 2.5	PASS
		VN	-20	0.66	0.000351	± 2.5	PASS
		VN	-10	1.25	0.000665	± 2.5	PASS
		VN	0	-1.21	-0.000644	± 2.5	PASS
		VN	10	4.23	0.002250	± 2.5	PASS
		VN	20	0.73	0.000388	± 2.5	PASS
		VN	30	0.64	0.000340	± 2.5	PASS
		VN	40	3.15	0.001676	± 2.5	PASS
		VN	50	-1.59	-0.000846	± 2.5	PASS
	HCH	VN	-30	2.04	0.001072	± 2.5	PASS
		VN	-20	0.91	0.000478	± 2.5	PASS
		VN	-10	3.5	0.001840	± 2.5	PASS
		VN	0	-1.05	-0.000552	± 2.5	PASS
		VN	10	1.4	0.000736	± 2.5	PASS
		VN	20	-1.01	-0.000531	± 2.5	PASS
		VN	30	4.9	0.002576	± 2.5	PASS
		VN	40	-0.56	-0.000294	± 2.5	PASS
		VN	50	1.48	0.000778	± 2.5	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.4	-0.000215	± 2.5	PASS
		VN	TN	4.79	0.002575	± 2.5	PASS
		VH	TN	3.27	0.001758	± 2.5	PASS
	MCH	VL	TN	2.85	0.001516	± 2.5	PASS
		VN	TN	2.95	0.001569	± 2.5	PASS
		VH	TN	-0.89	-0.000473	± 2.5	PASS
	HCH	VL	TN	0.83	0.000437	± 2.5	PASS
		VN	TN	1.82	0.000958	± 2.5	PASS
		VH	TN	4.45	0.002342	± 2.5	PASS
16QAM	LCH	VL	TN	1.89	0.001016	± 2.5	PASS
		VN	TN	1.14	0.000613	± 2.5	PASS
		VH	TN	2.72	0.001462	± 2.5	PASS
	MCH	VL	TN	4.46	0.002372	± 2.5	PASS
		VN	TN	-1.04	-0.000553	± 2.5	PASS
		VH	TN	-0.49	-0.000261	± 2.5	PASS
	HCH	VL	TN	3.65	0.001921	± 2.5	PASS
		VN	TN	3.23	0.001700	± 2.5	PASS
		VH	TN	1.48	0.000779	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.5	0.001882	± 2.5	PASS
		VN	-20	4.81	0.002586	± 2.5	PASS
		VN	-10	3.15	0.001694	± 2.5	PASS
		VN	0	1.94	0.001043	± 2.5	PASS
		VN	10	3.14	0.001688	± 2.5	PASS
		VN	20	-1.51	-0.000812	± 2.5	PASS
		VN	30	-0.12	-0.000065	± 2.5	PASS
		VN	40	4.59	0.002468	± 2.5	PASS
		VN	50	2.35	0.001263	± 2.5	PASS
	MCH	VN	-30	4.34	0.002309	± 2.5	PASS
		VN	-20	3.92	0.002085	± 2.5	PASS
		VN	-10	2.18	0.001160	± 2.5	PASS
		VN	0	1.01	0.000537	± 2.5	PASS
		VN	10	4.11	0.002186	± 2.5	PASS
		VN	20	-0.24	-0.000128	± 2.5	PASS

		VN	30	3.52	0.001872	± 2.5	PASS
		VN	40	-0.6	-0.000319	± 2.5	PASS
		VN	50	4.25	0.002261	± 2.5	PASS
	HCH	VN	-30	-1.6	-0.000842	± 2.5	PASS
		VN	-20	0.4	0.000211	± 2.5	PASS
		VN	-10	-0.92	-0.000484	± 2.5	PASS
		VN	0	4.19	0.002205	± 2.5	PASS
		VN	10	-0.59	-0.000311	± 2.5	PASS
		VN	20	1.93	0.001016	± 2.5	PASS
		VN	30	-1.36	-0.000716	± 2.5	PASS
		VN	40	-0.14	-0.000074	± 2.5	PASS
		VN	50	0.77	0.000405	± 2.5	PASS
		16QAM	LCH	VN	-30	1.32	0.000710
VN	-20			-1.39	-0.000747	± 2.5	PASS
VN	-10			4.51	0.002425	± 2.5	PASS
VN	0			1.26	0.000677	± 2.5	PASS
VN	10			-1.15	-0.000618	± 2.5	PASS
VN	20			0.46	0.000247	± 2.5	PASS
VN	30			2.82	0.001516	± 2.5	PASS
VN	40			1.72	0.000925	± 2.5	PASS
VN	50			2.57	0.001382	± 2.5	PASS
MCH	VN		-30	1.44	0.000766	± 2.5	PASS
	VN		-20	-1.76	-0.000936	± 2.5	PASS
	VN		-10	-0.88	-0.000468	± 2.5	PASS
	VN		0	-1	-0.000532	± 2.5	PASS
	VN		10	1.77	0.000941	± 2.5	PASS
	VN		20	-1.66	-0.000883	± 2.5	PASS
	VN		30	1.07	0.000569	± 2.5	PASS
	VN		40	0.04	0.000021	± 2.5	PASS
	VN		50	4.88	0.002596	± 2.5	PASS
HCH	VN		-30	0.4	0.000211	± 2.5	PASS
	VN		-20	0.57	0.000300	± 2.5	PASS
	VN		-10	0.01	0.000005	± 2.5	PASS
	VN		0	4.69	0.002468	± 2.5	PASS
	VN		10	-0.91	-0.000479	± 2.5	PASS
	VN		20	0.42	0.000221	± 2.5	PASS
	VN		30	-0.92	-0.000484	± 2.5	PASS
	VN		40	1.65	0.000868	± 2.5	PASS
	VN		50	4.62	0.002432	± 2.5	PASS